

### REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 1-12 were pending in this application. Claims 1 and 7 have been amended and new claims 12-13 have been added. Accordingly, claims 1-14 will be pending herein upon entry of this Amendment, of which claims 1 and 7 are independent claims. For the reasons stated below, Applicant respectfully submits that all claims pending in this application are in condition for allowance.

In the Office Action, claims 1, 3, and 5 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,926,217 to Peterson et al. ("Peterson"), claims 1-4 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,814,803 to Olmstead et al. ("Olmstead") in view of U.S. Patent No. 6,366,866 to Kanagawa et al. ("Kanagawa"), and claims 5-6 were rejected under U.S.C. §103(a) as being unpatentable over Peterson in view of U.S. Patent No. 6,724,245 to Kwon et al. ("Kwon"). Furthermore, claims 7-12 were rejected under U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,038,096 to Obie et al. ("Obie") in view Olmstead, Kwon, and U.S. Patent No. 6,366,866 to Kanagawa. To the extent these grounds of rejection might still be applied to claims presently pending in this application, they are respectfully traversed.

Amended claims 1 and 7 relate to interface circuitries for a display chip including, among other things, an input node for receiving an analog image signal with a display resolution, a filter for processing said analog image signal and providing a processed

image signal at an internal node, and a clamping circuit connected between said internal node and a reference level, wherein the filter provides a bandwidth adjustable in response to said display resolution such that the greater said display resolution, the greater said bandwidth, and wherein the clamping circuit is used to clamp the internal node at a clamping voltage with reference to said reference level during a clamping interval.

As described in Figures 2 and 3 of the invention specification, a low pass filter 24 comprises a variable resistor  $R_f$  connected between an input node 20 and an internal node 28 and a capacitor  $C_f$  connected between the internal node 28 and a ground node. The variable resistor  $R_f$  is utilized to provide different resistances based upon the display mode and required bandwidth. As stated in the paragraph bridging pages 6 and 7, the filter 24 provides a bandwidth, by adjusting the resistance of the variable resistor  $R_f$ , in accordance with the display mode. For example, the resistance provided for the VGA mode of a 640x480 active resolution should be greater than that for XGA mode of a 1024x768 active resolution. The bandwidth is inversely proportional to the product of  $R_f$  and  $C_f$ . The greater the resistance, the less the bandwidth. Accordingly, the bandwidth applied for the VGA mode of the 640x480 active resolution is less than the bandwidth applied for XGA mode of the 1024x768 active resolution. It is for this reason that the applicant has changed "display mode" to "display resolution," and amended the independent claims 1 and 7 by incorporating the limitations of "the greater said display resolution, the greater said bandwidth."

Moreover, in the specification, page 7, lines 10-22, "the variable resistor  $R_f$  serves as a current-limiting element in the path from the input node 20 through the clamping

circuit 22 to a reference level REF during the clamping interval...the clamping circuit 22 performs the clamping during the clamping interval so as to adjust the reference level (that is, a clamping voltage) of the image signal Vp at the internal node 28 to fit in with the corresponding internal reference level determined by ADC unit.” Upon voltage dividing, the clamping voltage at the internal node 28 during the clamping interval varies with the resistance of the variable resistor Rf that affects the bandwidth of the low pass filter 24. In other words, the clamping voltage at the internal node varies with the bandwidth. Accordingly, the applicant adds new claims 13-14 to recite the feature of “variable clamping voltage”.

It is believed that none of Peterson, Olmstead, Kanagawa, Obie, and Kwon teaches or suggests the features “the greater said display resolution, the greater said bandwidth is” and “said clamping voltage varies with said bandwidth” as recited in amended claims 1 and 7 and added new claims. As Peterson fails to teach or suggest the above-mentioned feature, it is respectfully submitted that amended claim 1 is not anticipated by Peterson and should be patentable.

Furthermore, it would not have been obvious for one skilled in the art to combine Olmstead with Kanagawa or to combine Obie, Kwon, and Kanagawa to achieve the circuitries of amended claims 1 and 7 as none of the prior art considers the relationships between the display resolution, the clamping voltage and the bandwidth. Accordingly, it is respectfully submitted that amended claims 1 and 7 and their dependent claims 2-6 and 8-14 are patentable over the above references.

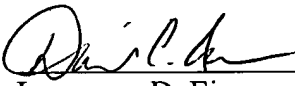
In view of the foregoing all of the claims in this case are believed to be in condition for allowance. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone Applicant's undersigned representative at the number listed below.

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Respectfully submitted,

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